Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) <u>In an Open System Interconnection (OSI) model having at least an application layer and a transport layer represented by a user datagram protocol (UDP),</u> <u>a</u> ~~A~~ method for transferring a user datagram protocol (UDP) signal using frame header information <u>generated at the application layer,</u> ~~for UDP packets~~ comprising:

pushing the ~~Pushing~~ frame header information <u>generated at the application layer</u> from ~~an~~ <u>the</u> application layer ~~protocol~~ to <u>UDP packets in the</u> ~~a~~ transport layer ~~protocol to transport~~ <u>and transporting</u> the UDP packets.

2.-3. (Cancelled)

4. (Currently amended) The method of claim 1, wherein the UDP packet ~~is a UDP packet with~~ <u>includes application layer specific</u> value-added information.

5.-6. (Cancelled)

7. (Currently Amended) A broadband network system configured to transfer user datagram protocol with value-added (UDPVA) packets from a broadband interface unit (BIntU) transceiver, the broadband network system comprising:

a data distribution center;

the BIntU transceiver being configured to generate the UDPVA packets, the

BIntU transceiver including:

an encoder/decoder (codec) configured to alternatively encode~~code~~ or

decode UDP frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein ~~the~~

~~DSP portion includes a stack,~~ the DSP portion temporarily stores the UDP frame

information as UDPVA packets within a protocol ~~the~~ stack, and the UDPVA

packets are ~~is~~ in a form to be transmitted directly to a network destination address

device in response to a stack-based request; and

the BIntU transceiver is configured to transmit the UDPVA packets to the data

distribution center, and the data distribution center is configured to indicate when the data

distribution center is receiving UDPVA packets from the BIntU transceiver.

8. (Original) The broadband network system of claim 7, further comprising:

a second BIntU transceiver, the data distribution center configured to transmit

information included in the UDPVA packet that was received from the BIntU transceiver

to the second BIntU transceiver;

the second BIntU transceiver generating a return packet in response to the

received UDPVA packet, wherein the second BIntU transceiver transmits the return

packet to the data distribution center, and wherein the data distribution center transmits

information contained in the return packet to the BIntU transceiver, the return packet

indicates to the BIntU transceiver that the second BIntU transceiver has received the

information in the UDPVA packet.

3

9. (Original) The broadband network system of claim 7, further comprising software associated with the BIntU transceiver that permits the BIntU transceiver to interface with the data distribution center.

10. (Currently amended) A broadband network system configured to transfer user datagram protocol with value-added (UDPVA) packets from a broadband interface unit (BIntU) transceiver, the broadband network system comprising:

a data distribution center;

the BIntU is configured to generate the UDPVA packets, the BIntU transceiver including:

an encoder/decoder (codec) configured to alternatively ~~code~~encode or decode UDP frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein the DSP portion generates UDPVA packets in response to the UDP frame information, and wherein the UDPVA packets are ~~is~~ available for delivery to a network destination address or storage located on a local area network or a wide area network; and

the BIntU transceiver is configured to transmit the UDPVA packets to the data distribution center, and the data distribution center is configured to interface with the BIntU transceiver to indicate that the data distribution center is receiving packets from the BIntU transceiver.

11. (Original) The broadband network system of claim 10, further comprising:

a second BIntU transceiver, the data distribution center configured to transmit information included in the UDPVA packet that was received from the BIntU transceiver to the second BIntU transceiver;

the second BIntU transceiver generating a return packet in response to the received UDPVA packet, wherein the second BIntU transceiver transmits the return packet to the data distribution center, and wherein the data distribution center transmits information contained in the return packet to the BIntU transceiver, the return packet indicates to the BIntU transceiver that the second BIntU transceiver has received the information in the UDPVA packet.

12. (Currently amended) The broadband network system of claim 10, further comprising software associated with the BIntU transceiver that permits a the computer or set-top box to interface with the BIntU transceiver.

13. (Cancelled)

14. (Currently) In an Open System Interconnection (OSI) model having at least an application layer and a transport layer represented by a user datagram protocol (UDP), a A data structure for a included in user datagram protocol (UDP) packets, the UDP packets packet comprising:

value-added information generated at the application layer and included in the frame header information of the DSP packet that is transmitted from a broadband

5

interface unit (BIntU) transceiver to be received at a data distribution center, wherein the

value-added information triggers the data distribution center to transmit a return packet to

the BIntU transceiver indicating that the data distribution center received the UDP

packet.

15. (Original) The data structure of claim 14, wherein the value-added information that

causes the data distribution center to transmit the return packet to the BIntU transceiver

includes a Java applet.

16. (Original) The data structure of claim 14, wherein one return packet is transmitted

from the data distribution center to the BIntU transceiver for each UDP packet with

value-added information transmitted from the BIntU transceiver to the data distribution

center.

17. (Currently amended) A method for transferring user datagram protocol with value-

added (UDPVA) ~~packet~~ packets over a broadband network system from a first broadband

interface unit (BIntU) transceiver to a data distribution center, the method comprising:

    generating the UDPVA ~~packet~~ packets in the BIntU transceiver, the generating of

the UDPVA ~~packet~~ packets including:

        alternatively encoding~~coding~~ or decoding UDPVA frame information

        within an encoder/decoder (codec), and

            generating the UDPVA ~~packet~~ packets in response to the UDPVA frame

        information in a digital signal processor (DSP) portion coupled to the codec,

wherein the UDPVA packet is available for delivery to a network destination

address or storage located on a local area network or a wide area network; and

a means for receiving the UDPVA packet from the BIntU transceiver at a data

distribution center, the data distribution center being configured to interface with the

BIntU transceiver to indicate that the data distribution center is receiving information

from the BIntU transceiver in response to the received UDPVA packet.

18. (Original) The method of claim 17, wherein the UDPVA packet includes a Java

applet.

19. (Currently amended) An apparatus that transfers user datagram protocol with value-

added (UDPVA) packet over a broadband network system from a broadband interface

unit (BIntU) transceiver to a data distribution center, the method comprising:

a means for generating the UDPVA packet in the BIntU transceiver, the

generating of the UDPVA packet including:

a means for alternatively ~~coding~~ encoding or decoding UDP frame

information within an encoder/decoder (codec), and

a means for generating the UDPVA packet in response to the UDP frame

information in a digital signal processor (DSP) portion coupled to the codec,

wherein the UDPVA packet is available for delivery to a network destination

address or storage located on a local area network or a wide area network; and

a means for receiving the UDPVA packet at the data distribution center that is

transmitted from the BIntU transceiver, the data distribution center being configured to

interface with the BIntU transceiver to indicate that the data distribution center is receiving information from the BIntU transceiver in response to the received UDPVA packet.

20. (Currently amended) A broadband network system configured to transfer user datagram protocol with value-added (UDPVA) packet from a broadband interface unit (BIntU) transceiver, the broadband network system comprising:

a data distribution center;

the BIntU transceiver being configured to generate the UDPVA packets that are transmitted at or below a transport level, the BIntU transceiver including:

an encoder/decoder (codec) configured to alternatively ~~code~~ encode or decode UDP frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein ~~the DSP portion includes a stack,~~ the DSP portion temporarily stores the UDP frame information as UDPVA packet within a protocol ~~the~~ stack, and wherein the UDPVA packet is in a form to be transmitted directly to a network destination address device at or below the transport level; and

the data distribution center is configured to receive the UDPVA packet from the BIntU transceiver at or below the transport level, and the data distribution center is configured to interface with the BIntU transceiver to indicate when the data distribution center is receiving information from the BIntU transceiver wherein data transmitted between the BIntU transceiver and the data distribution center is maintained at, or below, the transport level.

8

21. (Original) The broadband network system of claim 20, further comprising a second BIntU transceiver, wherein the data distribution control center forwards the UDPVA packet to the second BIntU transceiver, and the second BIntU transceiver generates a return packet that is forwarded via the data distribution center to the BIntU transceiver that indicates that the second BIntU transceiver has received the UDPVA packet.

22. (Currently amended) <u>In an Open System Interconnection (OSI) model having at least an application layer and a transport layer represented by a user datagram protocol (UDP),</u> <u>an</u> A̶n̶ apparatus for transferring a user datagram protocol (UDP) signal using frame header information <u>generated at the application layer,</u> f̶o̶r̶ ̶U̶D̶P̶ ̶p̶a̶c̶k̶e̶t̶s̶ comprising:

means for pushing frame header information <u>generated at the application layer</u> from a̶n̶ <u>the</u> application layer p̶r̶o̶t̶o̶c̶o̶l̶ to <u>UDP packets in the</u> a̶-transport layer p̶r̶o̶t̶o̶c̶o̶l̶ ̶t̶o̶ t̶r̶a̶n̶s̶p̶o̶r̶t̶ <u>and transporting</u> the UDP packets.

23. (Currently amended) A broadband network system configured to transfer user datagram protocol with value-added (UDPVA) packets from a broadband interface unit (BIntU) transceiver, the broadband network system comprising:

a data distribution center;

the BIntU transceiver being configured to generate the UDPVA packets, the BIntU transceiver including:

an encoder/decoder (codec) configured to alternatively c̶o̶d̶e̶ <u>encode</u> or decode UDP frame information, and

a digital signal processor (DSP) portion coupled to the codec, wherein ~~the~~

~~DSP portion includes a stack,~~ the DSP portion temporarily stores the UDP frame

information as UDPVA packets within <u>a protocol</u> ~~the~~ stack, and the UDPVA

packets ~~is~~ <u>are</u> in a form to be transmitted directly to a network destination address

device <u>in response to a stack-based request,</u>

a security portion that positively identifies an end user at the BIntU

transceiver; and

the BIntU transceiver configured to transmit the UDPVA packets to the data

distribution center, and the data distribution center is configured to indicate to the BIntU

transceiver if the data distribution center has received UDPVA packets from the BIntU

transceiver.

24. (Original) The broadband network system of claim 23, further comprising:

a second BIntU transceiver, the data distribution center configured to transmit

information included in the UDPVA packet that was received from the BIntU transceiver

to the second BIntU transceiver; and

the second BIntU transceiver generating a return packet in response to the

received UDPVA packet, wherein the second BIntU transceiver transmits the return

packet to the data distribution center, and wherein the data distribution center transmits

information contained in the return packet to the BIntU transceiver, the return packet

indicates to the BIntU transceiver that the second BIntU transceiver has received the

information in the UDPVA packet.

25. (Original) The broadband network system of claim 24, wherein the security portion positively identifies an end user at the second BIntU transceiver.

26. (New) The broadband network system of claim 7, wherein the BIntU transceiver is located in a computer or a stand-alone set-top box.

27. (New) The broadband network system of claim 26, further comprising software associated with the BIntU transceiver that interfaces the computer or set-top box with the BIntU transceiver.

28. (New) The broadband network system of claim 10, wherein the BIntU transceiver is located in a computer or a stand-alone set-top box.

29. (New) The broadband network system of claim 28, further comprising software associated with the BIntU transceiver that interfaces the computer or set-top box with the BIntU transceiver.